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United States Patent [19]

Wyard

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[54] METHOD AND SYSTEM FOR THE DIRECT MANIPULATION OF INFORMATION, INCLUDING NON-DEFAULT DRAG AND DROP OPERATION

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[*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No. 5,630,080.

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Related U.S. Application Data

[60] Division of Ser. No. 278,455, Jul. 21, 1994, abandoned, which is a continuation-in-part of Ser. No. 054,565, Apr. 28, 1993, abandoned, which is a continuation-in-part of Ser. No. 794,063, Nov. 19, 1991, abandoned.

[51] Int. Cl.⁶ **G09G 5/08**[52] U.S. Cl. **345/146; 345/339; 707/531; 707/539**[58] Field of Search **345/146, 115, 345/117, 119, 145, 326, 339, 348; 707/531, 539, 540**

[56] References Cited

U.S. PATENT DOCUMENTS

4,931,783	6/1990	Atkinson	340/710
5,040,131	8/1991	Torres	364/521
5,140,678	8/1992	Torres	395/159
5,157,763	10/1992	Peters et al.	395/157
5,276,795	1/1994	Hoeber et al.	395/156
5,630,080	5/1997	Malamud et al.	345/347

OTHER PUBLICATIONS

"Working With Word; The Definition Guide to Microsoft Word on the Apple MacIntosh", Chris Kinata; 1987, pp. 112-113.

"Microsoft Windows: User's Guide", 1987, pp. 59, 18-24 of book 4.

"Review Portfolio: A Frame of Mind: Mindwrite", Flam-mang, Publish, vol. 2, No. 5, p. 86/2 6187.

"Mindwrite: Thought Processors"; Eugenides Tan, Nibble Mac, vol. 2, No. 2, p. 18110, Apr. 1, 1987.

"Positive For Windows 3.0"; User's Guide 1990; pp. 278-280, 284-285.

"Microsoft to Debut Office-Linking Spec. (Object Linking and Embedding Tech.", Paul M. Sherer, PC Week, vol. 7, Issue N49, Dec. 10, 1990.

"Mastering Windows™ 3.0" Robert Cowart 1990, pp. 68-71, 86-87, 224-227.

"Positive For Windows¹⁹⁸ 3.0 User's Guide," 1990, pp. 278-285.

Sherer, paul M., "Microsoft to Debut Office-Linking Spec. (Object Linking and Embedding Technology", PC Week vol. 7(49), Dec. 10, 1990.

Cowart, Robert, "Mastering Windows¹⁹⁸ 3.0", 1990, pp. 64-71, 86-87, and 224-227.

(List continued on next page.)

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[57] ABSTRACT

A user is provided with an easy-to-use approach to directly manipulating text in a word processing environment or the like. Text may be dragged from one location and dropped in another location to move the text to a new location. More generally, the user is provided with the option of performing a conventional drag and drop operation or an enhanced or non-default drag and drop operation. Separate buttons on a mouse are utilized to differentiate between the two types of drag and drop operations. In the conventional drag and drop operation, default behavior is exhibited when an object is dropped on another object. In the enhanced drag and drop operation, a user is presented a list of options of operations that may be performed when the object is dropped on the other object.

6 Claims, 12 Drawing Sheets

